

ANALYSIS OF THE MANAGEMENT FOR GENERAL ADMINISTRATION OF PHARMACY IN GAZA STRIP BY USING SWOT ANALYSIS

Sabah A. Abu Sharekh, Mohammed El Mougher and Nizam M. El-Ashgar*

Crises and Disaster Management Centre, The Islamic University-Gaza, Palestine.

Article Received on
03 Dec. 2018,

Revised on 24 Dec. 2018,
Accepted on 13 Jan. 2019

DOI: 10.20959/wjpps20192-13064

*Corresponding Author

Dr. Nizam M. El-Ashgar

Crises and Disaster
Management Centre, The
Islamic University-Gaza,
Palestine.

ABSTRACT

Continuous change in Gaza strip due to Israeli attack and siege affects directly many sectors especially health sector and exactly the pharmaceutical one. Consequently, good management for General Administration of Pharmacy is required to avoid the decrease in medicines via analysis of strengths, weaknesses, opportunities and threats by using SWOT tool. The descriptive analysis was used by interviews with stakeholders related to General Administration of Pharmacy in Gaza strip. General Administration of Pharmacy faces a deficit in the preparation of field inspectors on pharmaceutical companies. Also the participation rates of the Civil Defence and the

Ministry of Labor were reduced in joint inspection and control through committees that contribute to the control of all safety procedures and the prevention of risks. And it is difficult to export pharmaceuticals to the West Bank from Gaza factories because of division and occupation. The authors recommend a presence of clear definition of all stakeholders and responsibilities of the three parties of production (government - workers in for General Administration of Pharmacy - owners of companies, institutions and private pharmaceutical organizations). Also laboratories need to conduct hormone tests to ensure that is good for uses. The pharmaceutical system should be modernized according to international standards and indicators. The authors also recommend developing of computerized administrative system that connects the parties of production, institutions, companies and pharmaceutical warehouses. In addition to that there must be consolidation of decisions related to General Administration of Pharmacy and presence of special national strategy for pharmaceutical sector isolated from ministry of health.

KEYWORDS: Gaza Strip, General Administration of Pharmacy, Pharmaceutical Management, SWOT Analysis.

1. INTRODUCTION

Gaza Strip has been subjected to numerous direct and indirect attacks and threats by the Israeli occupation, which has been under siege since 2007, in addition to the repeated Israeli attacks on Gaza strip. It also prevented local factories from importing many of the materials they needed in pharmaceutical manufacturing. Which contributed to the increase of suffering and the need to import medicines ready from abroad and put restrictions on imports and prevent many of them entering Gaza Strip (Ministry of Health, 2018).

In light of these conditions, changes in the population of the strip, the spread of diseases and their negative impact on the life of the individual and society, it was necessary to work on the development of the pharmaceutical health system in Gaza. Also make good management to develop the services provided, appropriate to meet the increasing need for these services, work to increase the effectiveness and the quality of medicine as one of the most important elements that work to reduce the spread of diseases and prevent the negative effects that affect the human (General Organization for Food and Drug, Strategic Plan 2016-2018, p. 1).

There is no doubt that the wars and successive attacks on Gaza strip have contributed to the entry of many medicines into Gaza Strip, because of the closure of the crossings and the fact that they have not been allowed to enter the Strip until after a period of time the proportion of expired medicines that are not reused or recycled has been destroyed. The total donations during the aggression of 2008, while 95% of the total contributions were utilized in 2012, as a result of the adoption of mechanisms of emergency system in the utilization and management of medicines received for the sector from donations, using specific mechanisms for disposal in order to protect human health and environment (Brewer, B. &Antel, 2013).

1.1 Study problem

The problem of the study lies in the need for an integrated administrative system to deal with the medicines received for Gaza Strip, and the compatibility between the three production parties to implement the operational plans. This requires studying the reality of the management for General Administration of Pharmacy in Gaza strip through analysis and evaluation. The problem is summarized in two questions:

- What is the method used to manage pharmaceutical sector by the General Administration of Pharmacy in Gaza strip?
- How to make analysis for internal & external environment of management for General Administration of Pharmacy?

1.2 Objectives of the study

Studying the current situation in the management for General Administration of Pharmacy in Gaza strip was conducted through:

- Identifying and analysing the administrative system for General Administration of Pharmacy (planning, directing, organizing, monitoring and evaluation).
- Implementing the analysis of the internal and external environment on for General Administration of Pharmacy in Gaza strip.

2. Study methodology

The researchers used the analytical descriptive approach which followed by interviews with specialists in general management for General Administration of Pharmacy, in addition to SWOT analysis of the internal and external environment of the organization, which was based on data collection form according to the analysis model prepared by the authors.

2.1 Study Sample

Based on the study problem, its objectives and its variables, the target study sample was the relevant people in the field of building national strategies and sectorial goals for General Administration of Pharmacy. The sample study was ten managers of General Administration of Medicine.

2.2 Study Tool

The researchers used SWOT according interviews with stakeholders and specialists:

2.3 Study Area (Gaza Strip)

Gaza strip covers an area of 365 km². It divided into five governorates: North Gaza Governorate with an area of 61 km², Gaza Governorate with an area of 74 km², Middle Governorate with an area of 58 km², Khan Younis Governorate with an area of 108 km² and Rafah Governorate with an area of 64 km² (Ministry of Planning of Palestine, 2015, p. 31-38).

3. The situation for General Administration of Pharmacy in Gaza Strip

Palestine is one of the most unstable areas in the world, because it has undergone great challenges, the most important of which are the Israeli military attacks and the suffocating siege on Gaza Strip. Therefore, the demand for medicines increases due to direct injuries caused by wars and indirect injuries resulting from the Israeli siege on it. (EUR-Lex, 2017).

Management for General Administration of Pharmacy in Gaza Strip undergoes an analysis of the reality, needs and requirements of pharmaceuticals, from the planning processes, the formulation of goals for general administration and development of alternatives are launched (Ministry of Health, 2016). The planning processes are initiated, in which the best alternatives are selected and appropriate decisions are taken in determining activities that are consistent with the goals set by Palestinian Ministry of Health, and then the organization and coordination of all activities of the various parties of three productions, guidance start for General Administration of Pharmacy management end with monitoring and evaluation of all plans and objectives (Ayoub, 2018, Ministry of Health, 2004).

The most important stages of management are carried out by General Management of Pharmacy through its various departments. It regulates the pharmacy profession, distributes pharmaceuticals, monitors all labor market developments, the requirements of the society and government institutions and controls the safe disposal of pharmaceutical waste, expired medicines and contagious drugs in coordination with other governmental organizations with direct relevance (Ministry of Health, 2017). In addition, the submission of draft laws, legislation and regulations relating to management for General Administration of Pharmacy of the higher executive and legislative bodies to control legal violations in this sector (Al-Borsh, 2018 and Al-Borsh, 2017).

As a result of increasing of Israeli pressure on Gaza strip and the severity of the siege, the rate of deficit of medicines increased by 34% at the beginning of 2017 but decreased to 28% in March of the same year and at the end of the year gradually increased to 44%, which affected the public health of Palestinian community providing primary and health care services to immune suppressed patients, genetic diseases, cancer patients and blood diseases (General Administration of Pharmacy, 2017, p. 6-16). In order to get rid of the expired drugs, General Directorate use of the extension validity of the drug known as shelf life, as reported by David Nernberg in the American newspaper Huffington Post provided that it is kept

during storage, and that the packaging is not liquid opened from the receptor, because it is subject to good closure to prevent bacterial growth (Fox, 2017, Cross, I. C., 2011).

The Manager of General Administration of Pharmacy during his intervention in the conference of the crises and health disasters in November 2017 said that the extension of the validity of medicine is from the jurisdiction of Palestinian Ministry of Health and within a narrow range within the special determinants set by the governmental institution. Also the list of essential drugs traded in the Ministry of Health includes 516 medicinal products. The annual budget of medicines in the Ministry of Health is estimated at about 33.6 million dollars (General Administration of Pharmacy, 2017, p. 13). The estimated value of medicines during the year 2017, estimated (\$ 17,685,989) as shown in Table (1).

Table (1): The financial value of imports of medicines during the year 2017 divided by parties. Source: (General Administration of Pharmacy, 2017, p.14).

Incoming	Medicines (\$)
Purchases of the Ministry of Health	8871821
Ramallah Warehouses	5444421
Donations	3369747
Total	17,685,989

4. SWOT analysis.

Is a quadratic analysis model to study and assess the strengths and weaknesses of the organization's internal environment, opportunities and threats to its surrounding external environment? It was first used and treated by Albert Humphrey in the 1960 and 1970 at Stanford University. He used data for more than 500 companies and used it to build and design long and short term strategies and plans according to internal and external variables (Richter & Pahl, 2009).

4.1 Elements of quadratic analysis (SWOT), (Abu El-Nasr, 2012)

4.1.1 Strengths: Is a group of elements of the internal environment of the organization, which leads to the development of the administrative system and identify the motivation to implement the objectives and mission of the institution so that they have a comprehensive knowledge of all aspects, skills, resources and possibilities that will regulate the capabilities and increase the strength of the organization and its positive features.

4.1.2 Weaknesses: It is a group of negative influences on the internal environment of the organization, which prevents them from achieving the goals and the message, which

contributes to the deterioration and high rates of losses, so these points must be studied to turn them into strengths through scientific, technical expertise, scientific research to reach progress, success and compete with others.

4.1.3 Opportunities: Are the positive external influences that surround the institution and through which they can be used to increase the development and advancement of progress in achieving the objectives and mission of the organization. It can be part of national policies set by the state or positive developments of technology incubators developing the educational and academic system (Hampshire, 2010).

4.1.4 Threats: Negative indicators emanating from the external environment of the organization, which affect the conduct of administrative processes negatively and are often difficult to control because they are issued outside the management of the organization. But in the case of studying all the risks and expected to assess the frequency and effects of positive and negative, we can control some of them according to the plans and programs set by the institution to maintain the sustainability of its work (Tabash, 2016).

There is no doubt that opportunities and threats are uncontrollable elements, but it is possible to take advantage of them and make radical changes that lead to a new reality that develops and elevates the organization.

5. RESULTS AND DISCUSSION

According to applied SWOT analysis, for the internal and external environment management for General Administration of Pharmacy and analysed data collection from the interview with stakeholders. (Kurdia, 2018, Lobad, 2018, Al Dawaheidi, 2018, Al-Borsh, 2018, Ayoub, 2018, Nasr, 2018).

5.1 Internal environment: The internal environment is divided into strengths and weaknesses.

5.1.1 Strengths point: The analysed data of the strengths of the administrative process are described in the items in Table (2).

Table (2): Strengths points of management for General Administration of Pharmacy.

Stages of Management	Strengths points
Planning	<ol style="list-style-type: none"> 1. Using the planning approach in administrative processes, and flexibility in the design and implementation of operational strategies and programs. 2. The management adopts the proposals submitted by the staff to develop tools and methods. 3. The existence of flexible strategies and programs, which facilitates the process of change according to field changes. 4. There is diligence to make a stockpile of pharmaceutical precautions for emergency and critical cases by Department of Sub-Stores. 5. The geographical distribution of pharmacies meets the needs of community growth and urbanization. 6. The administrative specialties support the General Administration of Pharmacists that commensurate with the specializations required in the management. 7. The geographical distribution of warehouses achieves medical security of the society.
Organization	<ol style="list-style-type: none"> 1. Evidences are available such as: controlled drug circulation guide, controlled drug schedules, hospital pharmaceutical care guide, pharmacological registration guides and private drug control between companies and the government sector but in limited form. 2. The organizational structure of General Directorate delegate the powers of the staff. 3. There is a flexible organizational structure that can be modified and changed according to international standards. 4. There is a clear functional description of all functions for General Administration of Pharmacy. 5. There is a clear description of all administrative functions for General Administration of Pharmacy. 6. General Administration of Pharmacy check the financial revenues of the State Treasury. 7. There are regulations and legislation that contribute to meeting the needs of the pharmaceutical community. 8. The pattern and the management style used to raise the motivation of employees to work.
Guidance	<ol style="list-style-type: none"> 1. Everyone who works in General Administration of Pharmacy has a clear understanding of the stages of dealing with medicines and pharmaceuticals. 2. Most employees enjoy loyalty and belonging to their institutions. 3. The number of graduates in General Pharmacy specialization meets the needs of the local market. 4. The number of employees in General Administration of Pharmacy meets the needs of management in General Pharmacy specialization. 5. Public administration promotes innovation in General Administration of Pharmacy. 6. The government contributes to supporting the national product and improving its quality, giving priority in pricing, registration and tenders. 7. The public administration contributes to modernizing the mechanisms and methods according to the labor market variables in General Administration of Pharmacy. 8. There are employees who are able to create creativity in General Administration of Pharmacy.
Monitoring and	<ol style="list-style-type: none"> 1. Commitment to the system of accountability and transparency.

Evaluation	<ol style="list-style-type: none"> 2. Monitoring the implementation of the operational plan and monitoring the results. 3. Accountability and accountability mechanisms are available for results. 4. Clear control standards are available for all resources in General Administration of Pharmacy. 5. All workers in General Administration of Pharmacy have a clear understanding of risks. 6. There is a fit and harmony between the organizational units in public administration and the private sector.
-------------------	---

5.1.2 Weaknesses: The analysed stages of the weakness of the administrative process are described in the items in Table (3).

Table (3): Weaknesses of management for General Administration of Pharmacy.

Stages of Management	Weaknesses points
Planning	<ol style="list-style-type: none"> 1. The weakness of a national system by the syndicate of pharmacists or government agencies to motivate employees. 2. The absence of laboratories for hormone testing. 3. Limited training programs for all workers in pharmaceutical sector in line with the latest scientific developments that keep pace with standards, indicators and developments in the pharmaceutical field. 4. Need to devise new methodologies. 5. There has been a permanent deficit since 2007 until now.
Organization	<ol style="list-style-type: none"> 1. There is no clear definition of all powers and responsibilities of the three production parties (government - workers in the pharmaceutical sector - owners of companies, institutions and private pharmaceutical organizations). 2. Lack of direct evidence to provide community services to the public sector. 3. The number of employees in General Administration of Pharmacy does not cover the needs of the administration in other specialties. 4. There is no clear structure for wages and incentives for pharmaceutical workers (government sector). 5. There is no clear wage structure in the pharmaceutical field, especially the private sector. 6. Lack of organizational structure of some modern pharmaceutical specialties. 7. Limited development and operational budgets, so as not to meet the urgent and necessary needs of General Administration of Pharmacy 8. There is a need for pharmacy and drug laws, and there is a need to modernize the system according to international standards and indicators.
Guidance	<ol style="list-style-type: none"> 1. The number of graduates in the exact specialties of the pharmacy does not meet the needs of the local market, such as: pharmaceutical manufacturing, pharmacological analysis, clinical pharmacy, and pharmacological alertness. 2. Some cases, such as medical secretaries and accountants, are needed. 3. Limited local professional expertise in major specialties and support to for General Administration of Pharmacy. 4. Local expertise is not enriched by consulting international experts. 5. The weakness of the computerized administrative system that connects the parties of production, institutions, companies and pharmaceutical stores.
Monitoring and Evaluation	<ol style="list-style-type: none"> 1. The pattern and the administrative method used to raise the motivation of employees to work is in a limited manner because of procrastination in the ministerial procedures.

	<ol style="list-style-type: none"> 2. Innovation outputs are weak due to lack of physical stimulation. 3. Weak financial budget. 4. Lack of financial resources to purchase pharmaceutical supplies. 5. Non-unification of the readings issued between the two governments (the government of the former Gaza Strip and the government of Ramallah). 6. The division affects the application of strategies and programs according to political variables.
--	--

5.2 External environment: The external environment is divided into opportunities and threats facing the pharmaceutical sector.

5.2.1 Opportunities: The analysed stages of the opportunities of the administrative process are described in the items in Table (4).

Table (4): Opportunities of management for General Administration of Pharmacy.

Stages of Management	The Opportunities
Planning	<ol style="list-style-type: none"> 1. There is awareness by the specialized class of the nature of the work of the institution. 2. The private sector encourages employees to innovate new methods and systems. 3. Everyone is obliged to obtain medication according to needs. 4. Local and international institutions and companies operating in Gaza Strip are comply with the instructions of General Administration of Pharmacy. 5. Distribution of pharmaceutical stores and supplies according to the geographical needs of the population. 6. There is a relationship between General Administration of Pharmacy and the Pharmacists Association and owners of companies and warehouses.
Organization	<ol style="list-style-type: none"> 1. Partnership and cooperation with government and civil institutions. 2. Laboratories are available to conduct some tests such as Al-Azhar Laboratory (private) and the Public Health Laboratory (Ministry). 3. Special laboratories are available for all medical tests. 4. The public and international sympathy with Palestinian people contributes to the needs of the emergency pharmaceutical sector through in-kind assistance.
Guidance	<ol style="list-style-type: none"> 1. Willingness to volunteer and work. 2. The existence of popular and international sympathy with Palestinian cause and the desire to provide assistance for construction and reconstruction. 3. Growing public confidence in General Administration of the Pharmacy. 4. There are support bodies (donors) for General Directorate of Pharmacy.
Monitoring and Evaluation	<ol style="list-style-type: none"> 1. There are ISO companies. 2. International institutions understand the status of General Administration of Pharmacy. 3. International reports on medical situation in Gaza strip affect the direction of support.

5.2.2 Threats: The analysed stages of threats facing for General Administration of Pharmacy are described in the items in Table (5).

Table (5): Explain the Threats from Management for General Administration of Pharmacy.

Stages of Management	The Threats
Planning	<ol style="list-style-type: none"> 1. Weakness of the Minister's directives on change and reform and the development of quality performance in General Administration of Pharmacy. 2. The absence of reciprocal visits between Gaza and the West Bank and vice versa, to exchange information and pharmacological needs. 3. Limited employment. 4. Non-participation of officials of General Administration of Pharmacy in conferences, workshops and external training. 5. Non-participation of workers in the private sector in conferences, workshops and external training. 6. Lack of funding in the field of assigning developmental activities and programs in General Administration of Pharmacy. 7. The government does not provide financial budgets according to the needs schedule in Gaza strip. 8. The closure of the crossings has a significant negative impact on the availability of medicine in Gaza strip. 9. The absence of clear mechanisms for the provision of grants from international institutions of public administration to the pharmacy.
Organization	<ol style="list-style-type: none"> 1. The governmental authorities (Gaza strip and Ramallah) affect the procedures for licensing and registering companies to facilitate their work at the crossings. 2. Lack of employment opportunities for pharmacists in the public sector. 3. The siege imposed on Gaza strip. 4. The public administration cannot meet the needs of people with unconventional weapons. 5. The difficulty of the amendment to the legislation and laws of General Administration of Pharmacy because of division and routine procedures that take long times. 6. The regulations are not updated continuously according to market variables. 7. The separation of Gaza strip into parts during military attacks affects medical distribution. 8. The impact of the changes that have occurred and are continuing in the Arab region on the support provided for General Administration of Pharmacy. 9. Grants, donations and expenditures do not meet the requirements for General Administration of Pharmacy in light of the high drug deficit. 10. Impact of cutting aid and international aid on Gaza since 2007 until now on General Administration of Pharmacy.
Guidance	<ol style="list-style-type: none"> 1. The monopoly of the West Bank public administration for international aid. 2. The weakness of the contribution of the private sector to provide the pharmaceutical requirements in the event of crises experienced by General Directorate of Pharmacy. 4. Some disciplines need expertise and techniques to improve their

	<p>performance.</p> <ol style="list-style-type: none"> 5. Limited encouragement of employees to innovate new methods and systems in the private sector. 6. Palestinian division, and a number of donors considered the West Bank government as the reference to General Administration of Pharmacy. 7. Most international institutions operate according to certain methodologies and not according to the needs of the ministry.
Monitoring and Evaluation	<ol style="list-style-type: none"> 1. The absence of private entities providing advisory and technical services other than the governmental sector. 2. The political and physical divide affects the development and growth of General Administration of Pharmacy. 3. The impact of the blockade on the quality of services provided in General Administration of Pharmacy. 4. Palestinian situation and the Israeli violations affected the development and growth of General Administration of Pharmacy. 5. Disruption of power resources affects the storage of medicines. 6. The field is not allowed to volunteer graduates according to the law. 7. Poor evaluation of human risks related to negligence in the use of drugs. 8. Lack of public confidence in government pharmaceutical institutions due to lack of medical needs and requirements.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusion

1. The administrative process in General Administration of Pharmacy proceed in accordance with the four recognized administrative stages.
2. General Administration of Pharmacy participates in the identification of pharmaceutical strategies in Gaza strip.
3. General Administration of Pharmacy lacks planning for the participation of three production parties in planning related to General Administration of Pharmacy.
4. There is a clear organizational structure for General Administration of Pharmacy but needs to be updated and developed.
5. There is a need for precise pharmaceutical specialties in terms of management of General Administration of Pharmacy.
6. General Administration of Pharmacy is concerned with directing employees and owners of pharmaceutical companies and institutions in the implementation of plans and programs proposed by General Administration of Pharmacy.
7. General Administration of Pharmacy supervises the affairs of General Administration of Pharmacy in Gaza strip.
8. There is a specialized department in the control and evaluation of pharmaceutical sector.

9. General Administration of Pharmacy faces a deficit in the preparation of field inspectors on pharmaceutical companies and companies
10. The participation rates of the civil defense and the Ministry of Labor are reduced by joint inspection and control through committees that contribute to the control of all safety procedures and the prevention of risks.
11. It is difficult to export pharmaceuticals to the West Bank from Gaza factories because of division and occupation.

6.2 Recommendations

1. The need to develop an independent strategy for General Administration of Pharmacy.
2. The need to involve the private sector and employees in the preparation of operational and strategic plans.
3. Update organizational structure and job description.
4. To provide General Administration of Pharmacy with the various specialties in the pharmaceutical sector.
5. The need to prepare joint inspection committees with the Civil Defence, the Ministry of Labor and the Environment Authority
6. Improve and control field of pharmaceutical institutions.
7. The need for a computerized information system for management of pharmaceuticals.
8. The need to provide a communication channel to exchange information, experience and knowledge between General Administration of Pharmacy in the West Bank and Gaza.

ACKNOWLEDGMENT

The authors are grateful to the Crisis and Disaster Management Center at IUG for support and guidance.

REFERENCES

1. Abu El-Nasr, Medhat. "Elements of Strategic Planning and Strategic Thinking". E.1. Cairo: Arab Group for Training and Publishing, 2012.
2. Al-Borsh, Mounir: Director General of the General Directorate of Pharmacy, 23 May 2018. (Interview)
3. Al-Borsh, Mounir. "Management of the Medical Sector in the Gaza Strip". Conference on medical crises and disasters. Gaza, Islamic University, February 11, 2017.
4. Al Dawaheidi, Amjad: Director of the Middle East Pharmaceutical Factory: May 24, 2018. (Interview).

5. Ayoub, Sherine: Director of Planning, General Directorate of Pharmacy, May 27, 2018. (Interview).
6. Brewer, B. &Antel. A case study of the management of hazardous waste drugs in a large university hospital. *Journal of Chemical Health and Safety*. *Chemical Health and Safety*, 2013; 20(3): 2-7.
7. Cross, I. C. (2011). "Medical waste management". International Committee of the Red Cross. Geneva.
8. EUR-Lex. (2017, December 25). Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances. Retrieved from EUR-Lex: <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:31967L0548>
9. General Administration of Pharmacy. (2017): "Annual Report of 2017", Gaza.
10. Hampshire, U. O. (2010). Hazardous Materials Management Plan. Hampshire: University of New Hampshire - Office of Environmental Health and Safety.
11. Kurdia, Ayman, Director of the Department of Supervision and Inspection January 24, 2018. (Interview)
12. Lobad, Nour: Head of Pharmaceutical Licensing, Licensing Department, Ministry of Health, May 2, 2018. (Interview)
13. Ministry of Health. (2016). "Annual Report of the Ministry of Health". Gaza Unpublished internal report
14. Ministry of Health. (2017). "National Health Strategy 2014-2016". Gaza.
15. Ministry of Health. (2004). "Palestinian Public Health Law". Gaza.
16. Ministry of Health. (2018). "Quarterly report of the Ministry of Health". Gaza. Unpublished internal report
17. Ministry of Planning of Palestine. (2015). "Regional Plan for the Southern Governorates 2005-2020" Updated Version (3). Gaza.
18. Nasr, Mohammed: Assistant Director of the Department of Pharmacy at UNRWA. 23 January 2018. (Interview).
19. Tabash, M. I.-B.-H. Impact of an intervention programme on knowledge, attitude and practice of healthcare staff regarding pharmaceutical waste management. Gaza, Palestine. *Public health*, 2016; 138: 127-137.